Appln. No.: 10/502,428

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Amendment Dated December 19, 2005 Reply to Office Action of October 17, 2005

## **Remarks/Arguments:**

Claims 10-19 stand finally rejected under 35 U.S.C. §103(a) as unpatentable over U.S. Patent No. 6,231,134 (Fukasawa '134) in view of either U.S. Patent No. 6,709,075 to Crombez et al. (Crombez '075) or JP 9-37407 to Ibaraki et al. (JP 9-37407 corresponds to U.S. Patent No. 5,915,801, referenced on the Supplemental Information Disclosure Statement submitted herewith, and is hereinafter referred to as Taga '801). Applicants respectfully traverse these rejections.

"To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations." M.P.E.P. §2143.

Independent claim 10 recites a method for coordinating the application of regenerative and anti-lock brake systems wherein the regenerative brake system is switched off upon entry into an ABS control phase and comprising the steps of applying post ABS regenerative braking by the regenerative brake system at the termination of the ABS control phase based on determined criteria with the post ABS regenerative braking being in a modified form compared to a regenerative braking operation prior to the entry into the ABS control phase.

Figures 8A and 8B of Fukasawa '134, and step 119, are cited as appearing to indicate that regenerative brake commands are generated upon ABS termination, and that the command values are compensated when compared to previous regenerative brake commands. Applicants respectfully disagree. Fukasawa '134 corresponds to DE 198 42 472 A1 which is referenced in the Background section of present application. As explained therein, while the Fukasawa system includes a vehicle brake system with friction devices and regenerative brake devices, the regenerative brake system stays disconnected during ABS control, but is simply readmitted after the ABS control, thereby shifting the total braking power to the driving axle. A possible result is an undesirable repeating change-over between ABS - regenerative braking - ABS - etc.

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The simple readmittance of the regenerative brake system is explained in Fukasawa '134 at col. 39, Ins. 47-62.

If the condition for terminating the anti-lock brake control or the condition for permitting the regenerative braking torque control is satisfied, the control flow goes to steps S117, S118 and S119 to reset the anti-lock brake control flag to "0", permit the control of the regenerative braking torque and permit the regenerative braking torque compensating pressure decrease control and the regenerative braking torque compensating pulse number increase control. In step S118, the directional control valves 308, 310 and the various solenoid-operated shut-off valves are restored to their original positions. In step S119, the motor control device 42 is supplied with the information for permitting the control of the regenerative braking control, to permit the regenerative braking torque compensating pressure decrease control and the regenerative braking torque compensating pulse number increase control. (emphasis added).

Fukasawa '134 does not apply post ABS regenerative braking based on determined criteria, but instead simply switches back to permitting regenerative braking, in an on/off manner, and requires compensating pressure controls to compensate therefor.

Crombez '075 and Taga '801 do not overcome the shortcomings of Fukasawa '134.

Crombez '075 is similar to Fukasawa '134 in that upon termination of ABS control, the system simply "returns the regenerative brake and friction brake torque requests to those determined by step 36", which is the torque arrangement prior to ABS control. See col. 4, In.41 through col. 5, In. 6. Crombez '075 does not teach or suggest supplying post ABS regenerative braking based on determined criteria.

Taga '801 is directed to a system of utilizing control maps to control a braking torque based on various vehicle parameters. Taga '801 does not address in any manner the relationship of friction braking and regenerative braking during or after ABS control.

None of the cited references, alone or in any reasonable combination, teaches or suggests each limitation of the claimed invention. Claims 11-19 all ultimately depend from claim 10 and are therefore allowable for, *inter alia*, the reasons set forth above.

It is respectfully submitted that each of the pending claims is in condition for allowance. Early reconsideration and allowance of each of the pending claims are respectfully requested.

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If the Examiner believes an interview, either personal or telephonic, will advance the prosecution of this matter, it is respectfully requested that the Examiner get in contact with the undersigned to arrange the same.

Respectfully submitted,

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